

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A window assembly including a latching system for and a pivoting window sash having a pivoting end and a non-pivoting end, said latching system comprising:

an upper latch member disposed near the non-pivoting end of the window sash;

an anti-bow latch member disposed between the pivoting end of the window sash and said upper latch member;

an activating member operationally connected to said upper latch member and said anti-bow latch member for operating both said upper latch member and said anti-bow latch member,

wherein the pivoting window sash further includes a sash rail and a sash stile, said upper latch member being at least partially disposed within the sash rail and said anti-bow latch member being at least partially disposed within the sash stile, operation of the activating member retracting said upper latch member and said anti-bow latch member generally at the same time,

wherein the pivoting window sash is slidable within a slide channel of a window frame and both of said upper latch member and said anti-bow latch member are independently engageable with the slide channel of the window frame, and

an operating mechanism, said activating member being connected to at least one of said upper latch member and said anti-bow latch member via said operating mechanism, the operating mechanism including a horizontal linking member connected to both of said activating member and said upper latch member; and a vertical linking member connected to both of said anti-bow latch member and at least one of said horizontal linking member and said upper latch member,

wherein each of the horizontal linking member and the vertical linking member include a flexible element adapted to support a tensile force, but not generally adapted to support a compressive force.

2-26. (cancelled)

27. (cancelled)

28. (previously presented) The window assembly of claim 1, wherein said activating member is mounted to the window sash.

29. (cancelled)

30. (cancelled)

31. (cancelled)

32. (previously presented) The window assembly of claim 1, wherein said vertical linking member includes a rotating gear, and said horizontal linking member includes a toothed rack portion for engagement with said rotating gear.

33. (previously presented) The window assembly of claim 1, wherein said activating member further including a rotating cam connected to said horizontal linking member.

34. (previously presented) The window assembly of claim 33, wherein said horizontal linking member includes an elastically-loaded piston rod.

35. (previously presented) The window assembly of claim 33, wherein said flexible element includes a retractable cable, said rotating cam includes means for winding said retractable cable around said rotating cam, and said operating mechanism includes spring-loaded means for extending said retractable cable.

36. (cancelled)

37. (previously presented) The window assembly of claim 33, wherein said vertical linking member includes a rolling member disposed in the sash stile.

38. (previously presented) The window assembly of claim 33, wherein said vertical linking member includes a pivoting component disposed in the sash stile and connected to said anti-bow latch member.

39. (previously presented) The window assembly of claim 1, wherein said pivoting window sash further includes an L-shaped slot, and said flexible element includes a flexible tape member disposed in the L-shaped slot and connected to said activating member.

40. (cancelled)

41. (currently amended) A window assembly, including:

a pivoting window sash having a horizontal sash rail and a vertical sash stile; and
a latching system, including :

an upper latch member at least partially disposed within the horizontal sash rail, extendable through an opening in the vertical sash stile, and movable to at least an extended position, wherein in the extended position the upper latch member is configured to engage a slide channel of a window frame;

an anti-bow latch member at least partially disposed within the vertical sash stile, extendable through an opening in the vertical sash stile, and movable to at least an extended position, wherein in the extended position the anti-bow latch member is configured to engage the slide channel of [[a]] the window frame;

an activating member disposed on at least one of the sash rail and the sash stile; and

an operating mechanism for connecting said activating member with both of said upper latch member and said anti-bow latch member, actuation of said activating member causing both of said upper latch member and said anti-bow latch member to move from the extended position to a retracted position via said operating mechanism generally at the same time, wherein in the retracted position both of said upper latch member and said anti-bow latch member are configured to disengage from [[a]] the slide channel of [[a]] the window frame to permit the pivoting window sash to pivot to a tilted position,

wherein said operating mechanism further includes a horizontal linking member at least partially disposed in the horizontal sash rail and connected to both of said upper latch member and said activating member; and a vertical linking member at least partially disposed in the vertical sash stile and connected to both of said anti-bow latch member and at least one of said activating member, said horizontal linking member, and said upper latch member,

wherein each of the horizontal linking member and the vertical linking member include a flexible tape member, and

wherein said pivoting window sash further includes an L-shaped track, the vertical linking member being disposed within the L-shaped track.

42. (cancelled)

43. (currently amended) The window assembly of claim 41, wherein further actuation of said activating member causes both of said upper latch member and said anti-bow latch member to move from the retracted position back to the extended position via said operating mechanism, wherein in the extended position both of said upper latch member and said anti-bow latch member are configured to engage [[a]] the slide channel of [[a]] the window frame to retain the pivoting window sash in a non-tilted position.

44. (previously presented) A window assembly, including:

a pivoting window sash having a first side; a second side; and a pivoting end;

a window frame having a first slide channel and a second slide channel; and

a latching system, including:

 a first upper latch member disposed on the first side of the pivoting window sash for engaging the first slide channel of the window frame;

 a second upper latch member disposed on the second side of the pivoting window sash for engaging the second slide channel of the window frame;

 a first anti-bow latch member disposed on the first side of the pivoting window sash between said first upper latch member and said pivoting end for engaging the first slide channel of the window frame;

 a second anti-bow latch member disposed on the second side of the pivoting window sash between said second upper latch member and said pivoting end for engaging the second slide channel of the window frame;

 an activating member disposed on the pivoting window sash;

 a first horizontal linking member for operationally connecting said activating member with said first upper latch member; and

 a first vertical linking member for operationally connecting said activating member with said first anti-bow latch member, actuation of said activating member disengaging both of said first upper latch member and said first anti-bow

latch member from the first slide channel of the window frame generally at the same time,

wherein each of the horizontal linking member and the vertical linking member include a flexible tape member, and

wherein said first vertical linking member is operationally connected to said activating member via said first horizontal linking member.

45. (previously presented) The window assembly of claim 44, further including:

a second activating member;

a second horizontal linking member for operationally connecting said second activating member with said second upper latch member; and

a second vertical linking member for operationally connecting said second activating member with said second anti-bow latch member, actuation of said second activating member disengaging both of said second upper latch member and said second anti-bow latch member from the second slide channel.

46. (previously presented) The window assembly of claim 44, further including:

a second horizontal linking member for operationally connecting said activating member with said second upper latch member; and

a second vertical linking member for operationally connecting said activating member with said second anti-bow latch member, actuation of said activating member also disengaging said second upper latch member and said second anti-bow latch member from the second slide channel.

47. (previously presented) The window assembly of claim 46, wherein said first vertical linking member is operationally connected to said activating member via said first horizontal linking member, and said second vertical linking member is operationally connected to said activating member via said second horizontal linking member.

48. (cancelled)

49. (currently amended) A window assembly, including:

a pivoting window sash having a first side, a second side, a pivoting end, a non-pivoting end, and a sash rail; and

a latching system, including:

a first upper latch member disposed on the first side of the pivoting window sash near the non-pivoting end and movable to at least an extended position, wherein in the extended position the first upper latch member is configured to engage a first slide channel of a window frame;

a second upper latch member disposed on the second side of the pivoting window sash near the non-pivoting end and movable to at least an extended position, wherein in the extended position the second upper latch member is configured to engage a second slide channel of [[a]] the window frame;

a first anti-bow latch member disposed on the first side of the pivoting window sash between the pivoting end and the first upper latch member and movable to at least an extended position, wherein in the extended position the first anti-bow latch member is configured to engage [[a]] the first slide channel of [[a]] the window frame;

a second anti-bow latch member disposed on the second side of the window between the pivoting end and the second upper latch member and movable to at least an extended position, wherein in the extended position the second anti-bow latch member is configured to engage [[a]] the second slide channel of [[a]] the window frame;

a single activating member centrally disposed on the sash rail;

a first horizontal linking member for connecting said activating member with said first upper latch member;

a second horizontal linking member for connecting said activating member with said second upper latch member;

a first vertical linking member for connecting said first horizontal linking member with said first anti-bow latch member, said first vertical linking member being disposed within a first curved track; and

a second vertical linking member for connecting said second horizontal linking member with said second anti-bow latch member, said second vertical linking member being disposed within a second curved track,

wherein each of said first horizontal linking member, second horizontal linking member, first vertical linking member, and second vertical linking member include a flexible tape member,

actuation of said single activating member causing both of said first upper latch member and said first anti-bow latch member to move from the extended position to a retracted position and both of said second upper latch member and

said second anti-bow latch member to move from the extended position to a retracted position, wherein in the retracted position both of said first upper latch member and said first anti-bow latch member are configured to disengage from [[a]] the first slide channel of [[a]] the window frame and both of said second upper latch member and said second anti-bow latch member are configured to disengage from [[a]] the second slide channel of [[a]] the window frame to permit the pivoting window sash to pivot to a tilted position,

wherein actuation of said single activating member causes all of said latch members to move from the extended position to the retracted position generally simultaneously.

50. (cancelled)

51. (currently amended) A window assembly, including:

a pivoting window sash having a first side, a second side, a pivoting end, a non-pivoting end, and a sash rail; and

a latching system, including:

a first upper latch member disposed on the first side of the pivoting window sash near the non-pivoting end and movable to at least an extended position, wherein in the extended position the first upper latch member is configured to engage a first slide channel of a window frame;

a second upper latch member disposed on the second side of the pivoting window sash near the non-pivoting end and movable to at least an extended position, wherein in the extended position the second upper latch member is configured to engage a second slide channel of [[a]] the window frame;

a first anti-bow latch member disposed on the first side of the pivoting window sash between the pivoting end and movable to at least an extended position independently of the first upper latch member, wherein in the extended position the first anti-bow latch member is configured to engage [[a]] the first slide channel of [[a]] the window frame;

a second anti-bow latch member disposed on the second side of the window between the pivoting end and movable to at least an extended position independently of the second upper latch member, wherein in the extended position the second anti-bow latch member is configured to engage [[a]] the second slide channel of [[a]] the window frame;

a first activating member disposed on the sash rail toward said first side of the pivoting window sash and connected to said first upper latch member;

a second activating member disposed on the sash rail toward said second side of the pivoting window sash and connected to said second upper latch member;

a first vertical linking member for connecting said first activating member with said first anti-bow latch member; and

a second vertical linking member for connecting said second activating member with said second anti-bow latch member, wherein actuation of said first activating member causing both of said first upper latch member and said first anti-bow latch member to move from the extended position to a retracted position generally simultaneously and, wherein in the retracted position both of said first upper latch member and said first anti-bow latch member are configured to disengage from [[a]] the first slide channel of [[a]] the window frame, and actuation of said second activating member causing both of said second upper latch member and said second anti-bow latch member to move from the extended position to a retracted position generally simultaneously, wherein in the retracted position both of said second upper latch member and said second anti-bow latch member are configured to disengage from [[a]] the second slide channel of [[a]] the window frame to permit the pivoting window sash to pivot to a tilted position,

wherein each of the first and second vertical linking members include a flexible tape member,

wherein actuation of said first activating member causes a tensile force to be applied to the first vertical linking member to thereby cause the first anti-bow latch member to be moved to the retracted position, and

wherein actuation of said second activating member causes a tensile force to be applied to the second vertical linking member to thereby cause the second anti-bow latch member to be moved to the retracted position.

52. (currently amended) A window assembly including a latching system for and a pivoting window sash having a pivoting end and a non-pivoting end, said latching system comprising:

an upper latch member disposed near the non-pivoting end of the window sash;

an anti-bow latch member disposed between the pivoting end of the window sash and said upper latch member;

an activating member operationally connected to said upper latch member and said anti-bow latch member for operating both said upper latch member and said anti-bow latch member;

an operating mechanism, said activating member being connected to at least one of said upper latch member and said anti-bow latch member via said operating mechanism,

wherein said operating mechanism further includes a horizontal linking member connected to said upper latch member, and a vertical linking member connected to both of said anti-bow latch member and at least one of said horizontal linking member and said upper latch member, said activating member further including a rotating cam connected to said horizontal linking member, and

wherein said horizontal linking member has a toothed rack portion, and wherein said vertical linking member includes a gear shaft engaged with said toothed rack portion, and a toothed lower member disposed in the sash stile, said toothed lower member being engaged with said gear shaft and being connected to said anti-bow latch member.

53. (currently amended) A window assembly including a latching system for and a pivoting window sash having a pivoting end and a non-pivoting end, said latching system comprising:

an upper latch member disposed near the non-pivoting end of the window sash;

an anti-bow latch member disposed between the pivoting end of the window sash and said upper latch member;

an activating member operationally connected to said upper latch member and said anti-bow latch member for operating both said upper latch member and said anti-bow latch member;

an operating mechanism, said activating member being connected to at least one of said upper latch member and said anti-bow latch member via said operating mechanism, and

wherein said operating mechanism further includes a retractable cable connected to said anti-bow latch member, at least one pulley disposed in the sash stile, said activating member including a rotating cam, said retractable cable being connected to

Appln. No. 10/678,904
Amendment dated January 16, 2008
Reply to Office action dated January 11, 2008

said rotating cam and directed by said pulley, said rotating cam containing means for winding said retractable cable around said rotating cam; and means for extending said retractable cable.